Electronic Supplementary Information (ESI) for:

Chiroptical Generation and Amplification of Hyperbranched π-Conjugated Polymers in Aggregation States Driven by Limonene Chirality

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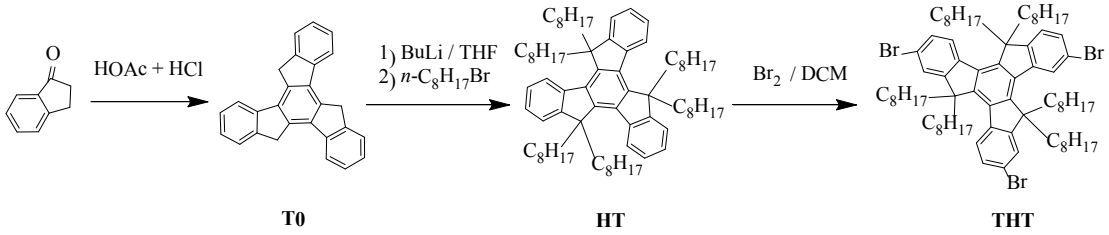


Scheme S1. Synthetic pathway of tribromohexahexyltruxene (THT).

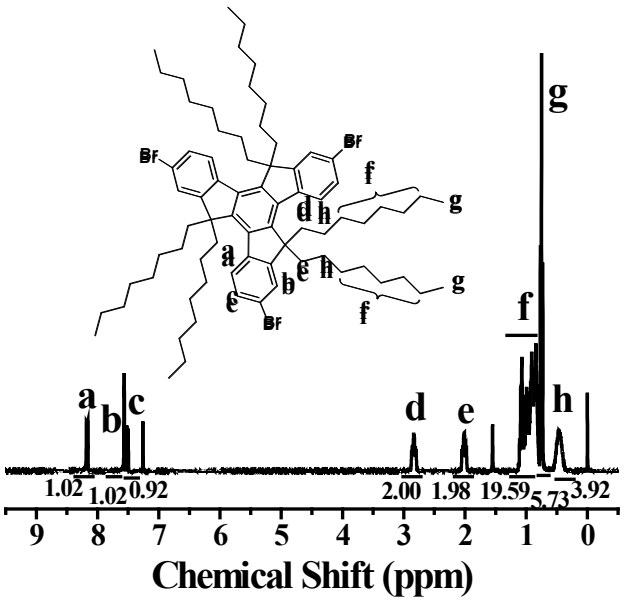


Fig. S1. ^{1}H NMR spectrum of THT in $CDCl_3$.

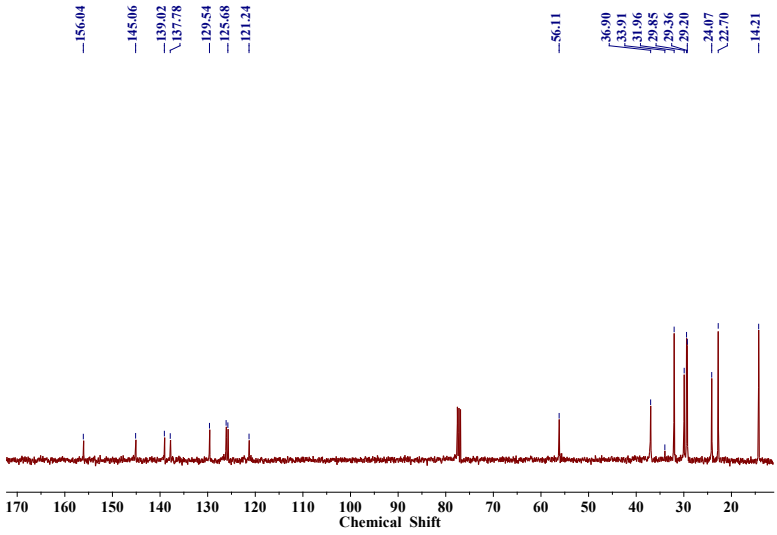
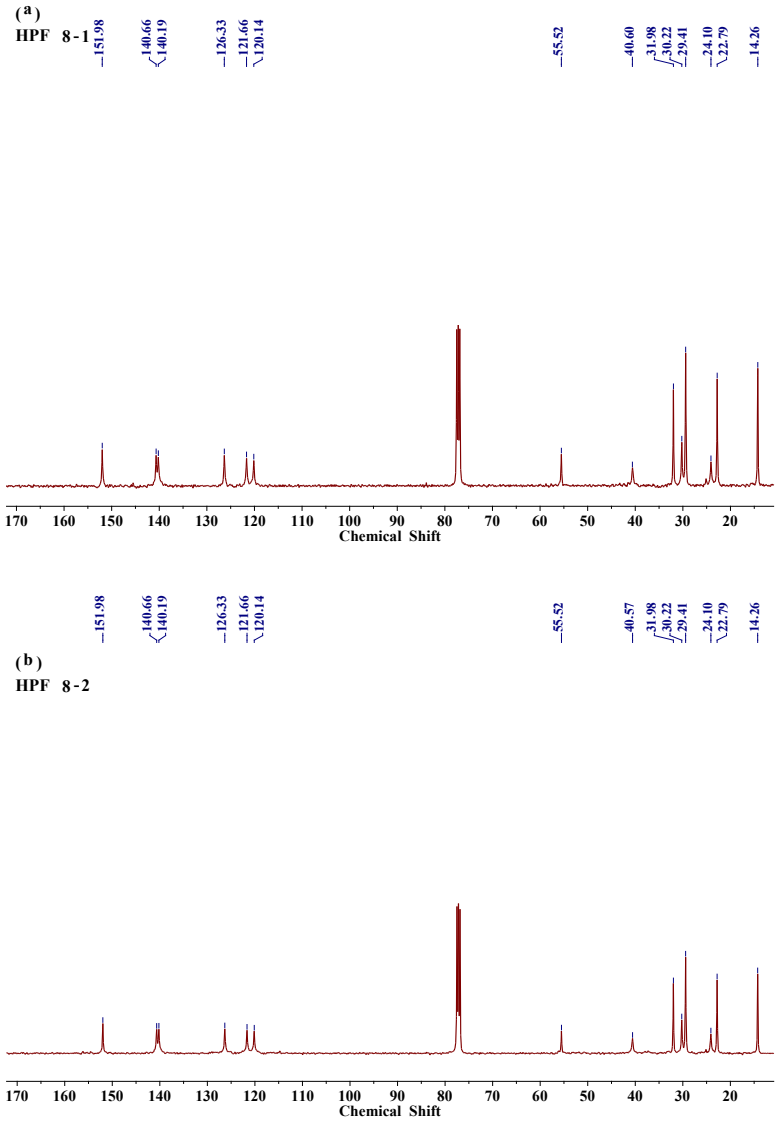


Fig. S2. ^{13}C NMR spectrum of THT in $CDCl_3$.



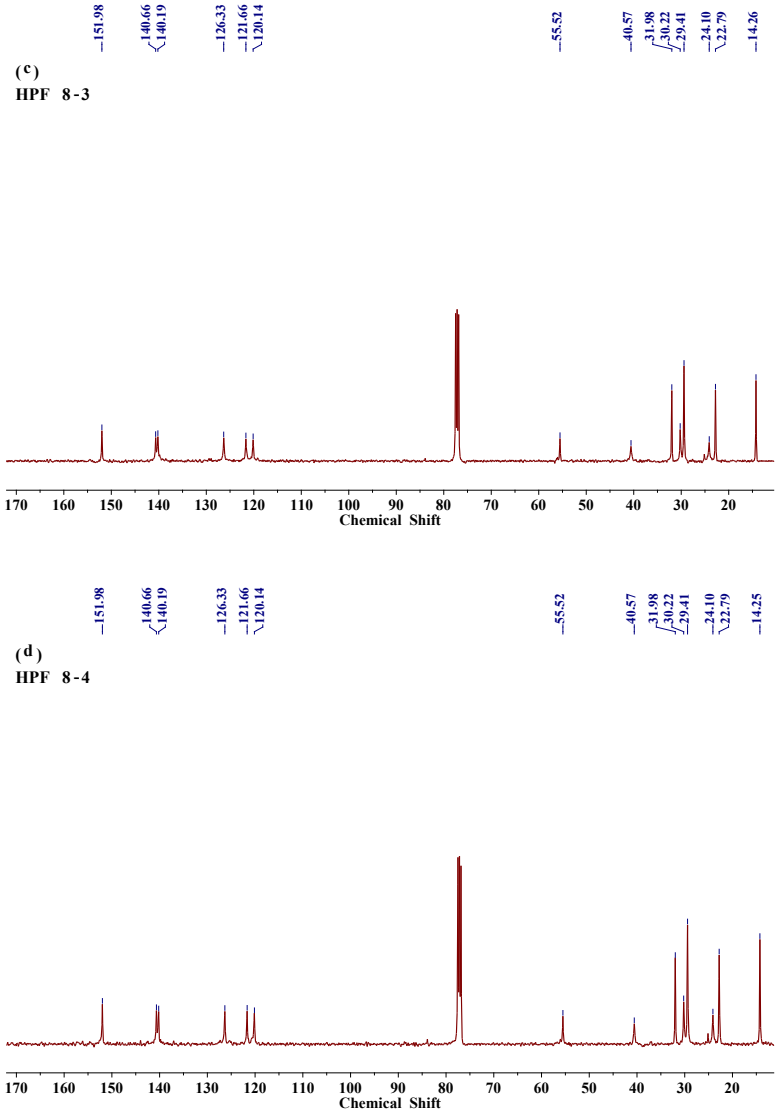


Fig. S3. ^{13}C NMR spectra of HPF8s in $CDCl_3$.

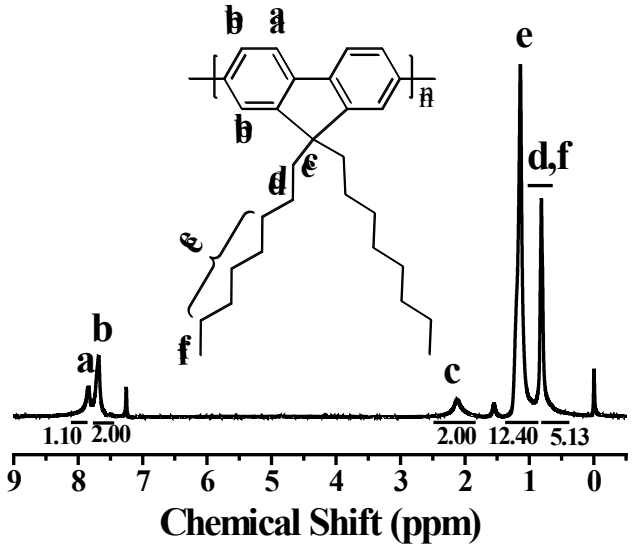


Fig. S4. ^{1}H NMR spectrum of PF8 in $CDCl_3$.

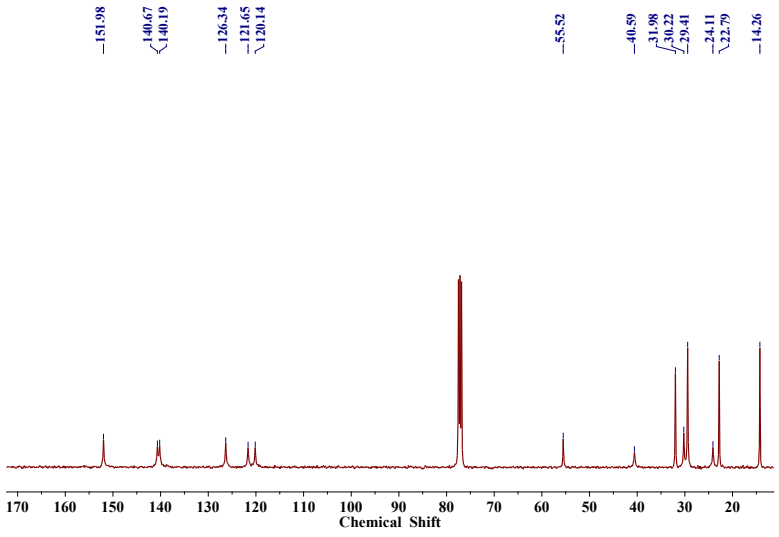


Fig. S5. ^{13}C NMR spectrum of PF8 in $CDCl_3$.

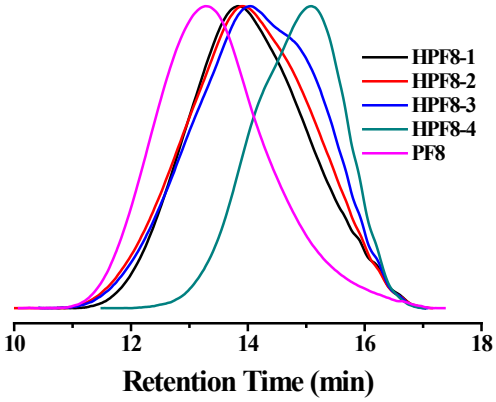


Fig. S6. SEC curves of hyperbranched π-conjugated HPF8s and linear PF8.

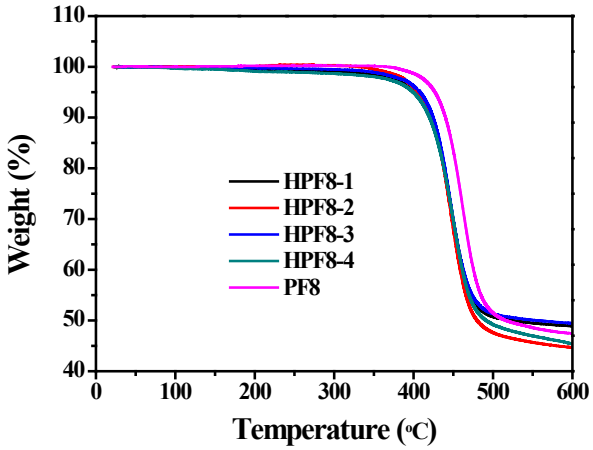


Fig. S7. TGA curves of hyperbranched π-conjugated HPF8s and linear PF8.

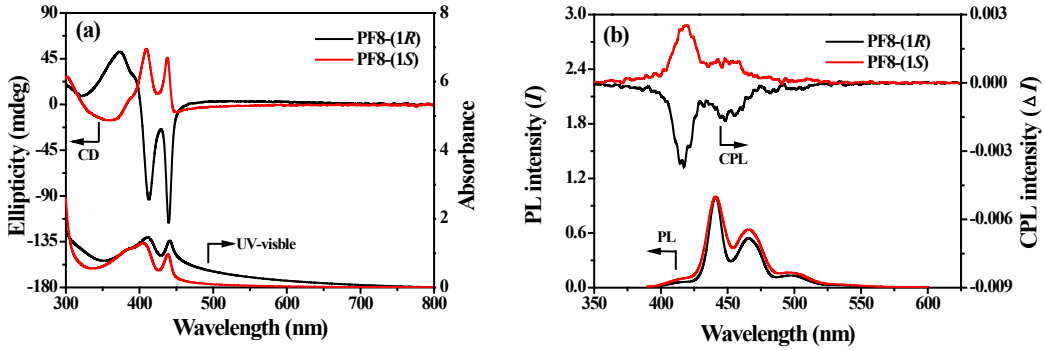


Fig. S8. (a) UV-vis/CD and (b) PL/CPL spectra of CD-silent PF8 aggregates ([repeating unit]$_0$ = 5.0 × 10^{-5} mol·L^{-1}, repeating unit: 9,9-di-*n*-octylfluorene) formed in the chiral tersolvents of $CHCl_3$/(1*R* or 1*S*)/CH_3OH = 0.3/1.2/1.5 (v/v/v), T = 25 °C.

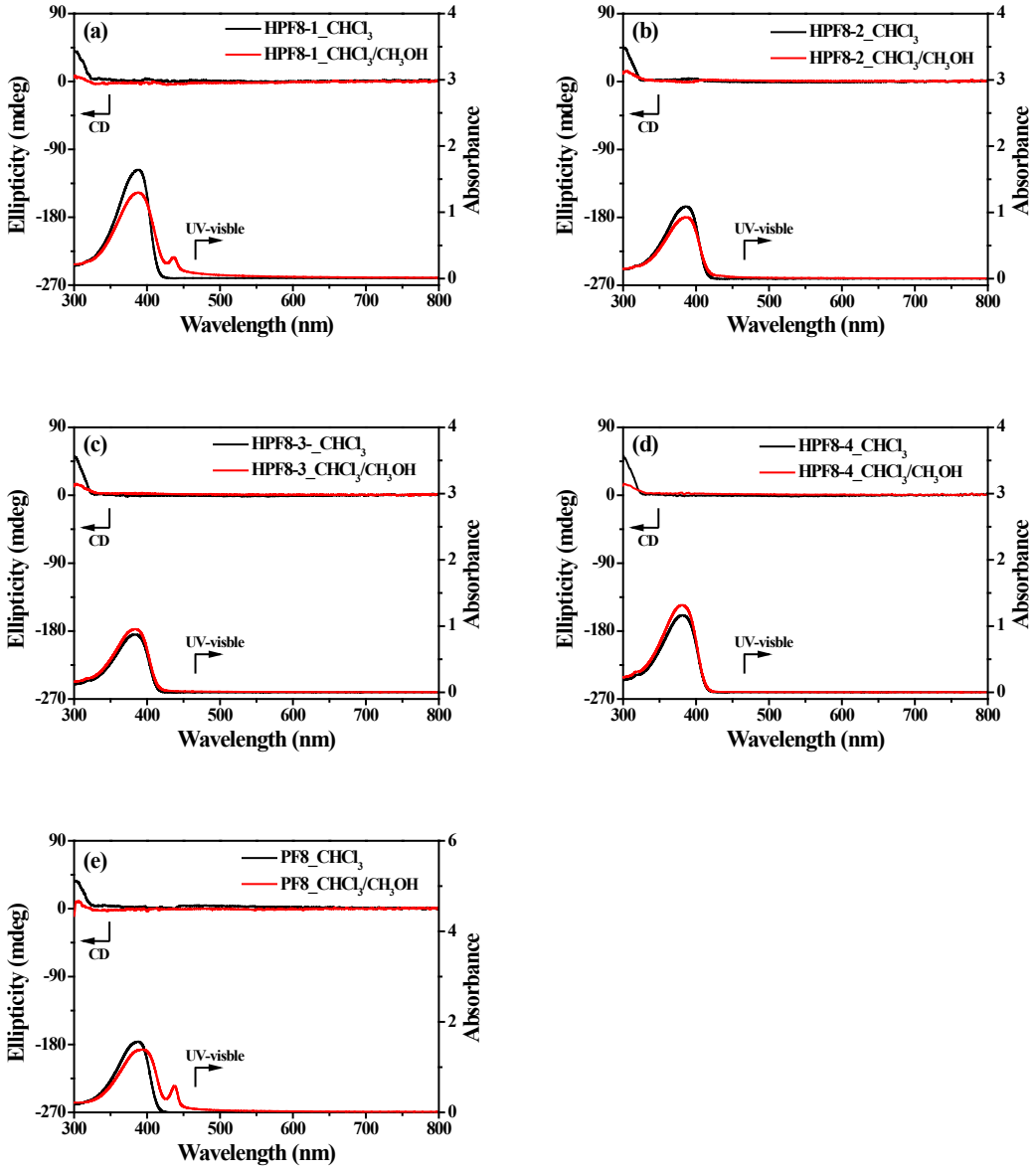
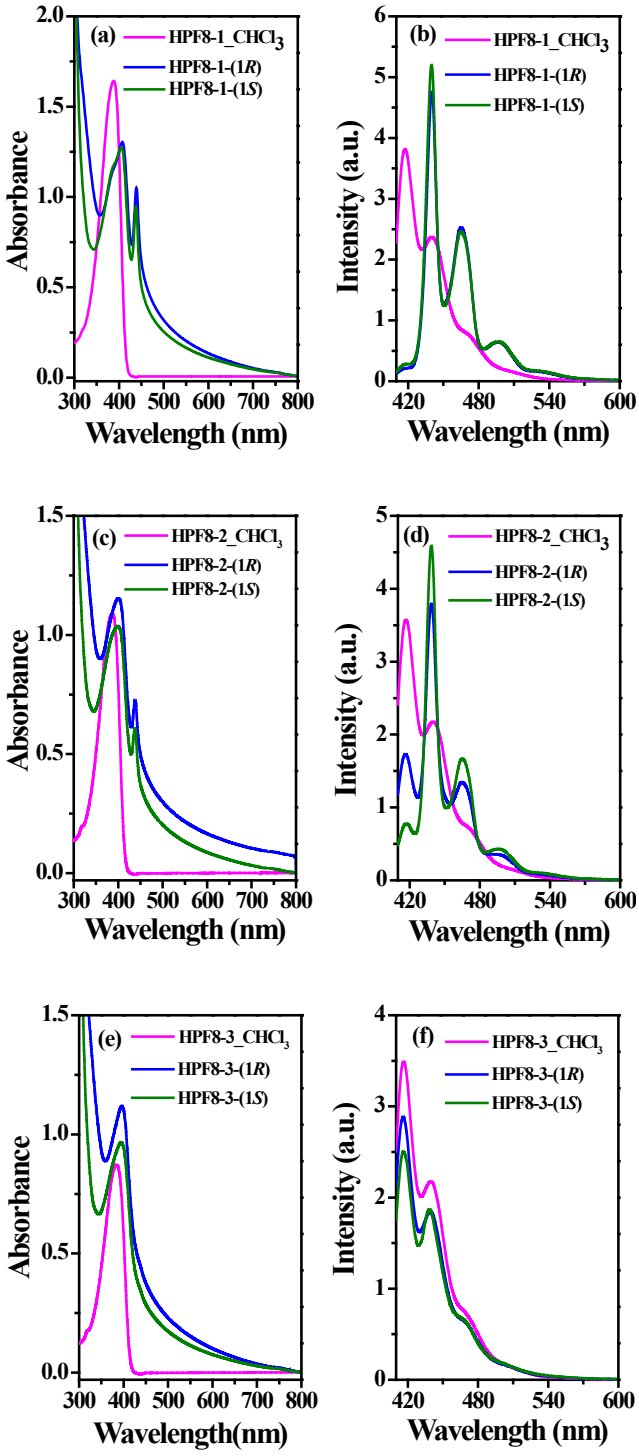


Fig. S9. UV-vis/CD spectra of CD-silent HPF8s ([repeating unit]$_0$ = 2.5 × 10^{-5} mol·L^{-1}) and PF8 ([repeating unit]$_0$ = 5.0 × 10^{-5} mol·L^{-1}, repeating unit: 9,9-di-*n*-octylfluorene) aggregates formed in the achiral cosolvent of $CHCl_3$/CH_3OH = 2.2/0.8 (v/v/v), T = 25 °C.



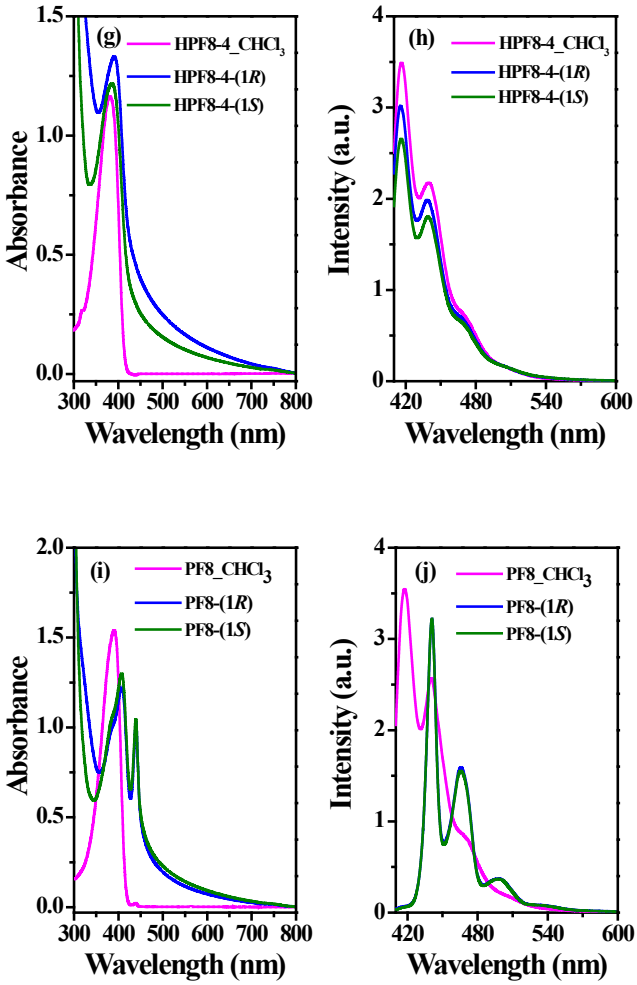
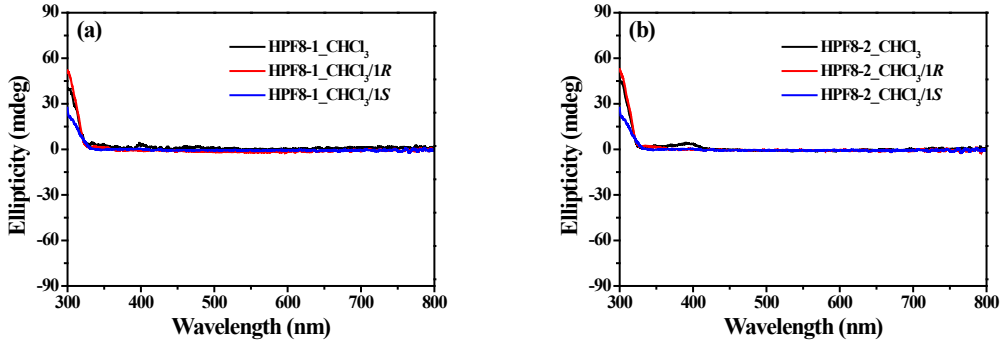


Fig. S10. (a, c, e, g, i) UV-vis and (b, d, f, h, j) fluorescence emission spectra of the HPF8s ([repeating unit]$_0$ = 2.5 × 10^{-5} mol·L^{-1}) and linear PF8 ([repeating unit]$_0$ = 5.0 × 10^{-5} mol·L^{-1}, repeating unit: 9,9-di-*n*-octylfluorene) in $CHCl_3$ and tersolvents of $CHCl_3$/(1*R* or 1*S*)/CH_3OH = 0.3/1.2/1.5 (v/v/v), T = 25 °C.



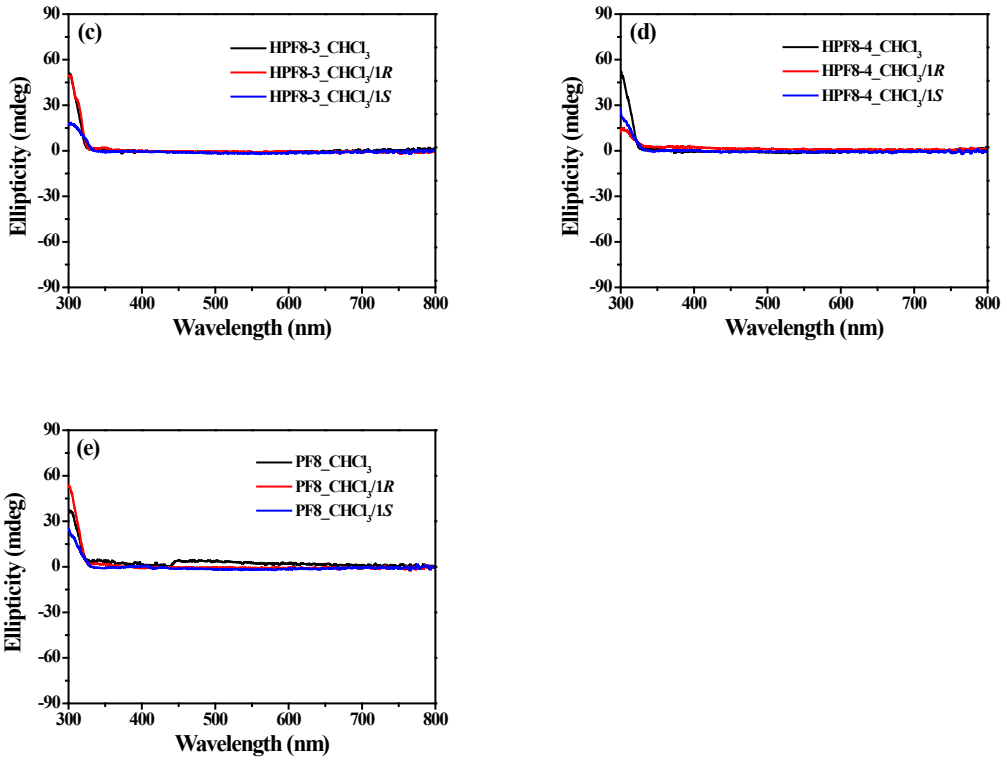
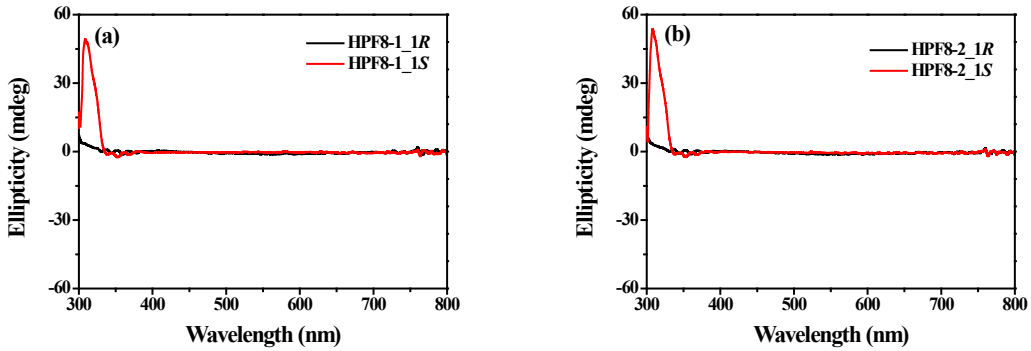


Fig. S11. CD spectra of CD-silent HPF8s ([repeating unit]$_0$ = 2.5 × 10^{-5} mol·L^{-1}, repeating unit: 9,9-di-*n*-octylfluorene) and PF8 ([repeating unit]$_0$ = 5.0 × 10^{-5} mol·L^{-1}) aggregates formed in $CHCl_3$, $CHCl_3$/(1*R* or 1*S*) mixture, T = 25 °C.



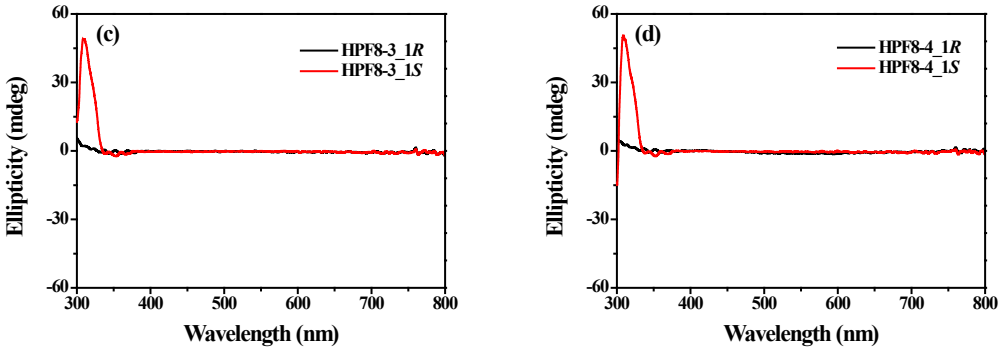


Fig. S12. CD spectra of CD-silent HPF8s ([repeating unit]$_0$ = 2.5 × 10^{-5} mol·L^{-1}, repeating unit denotes 9,9-di-*n*-octylfluorene) in 1*R* and 1*S*, respectively, T = 25 °C.

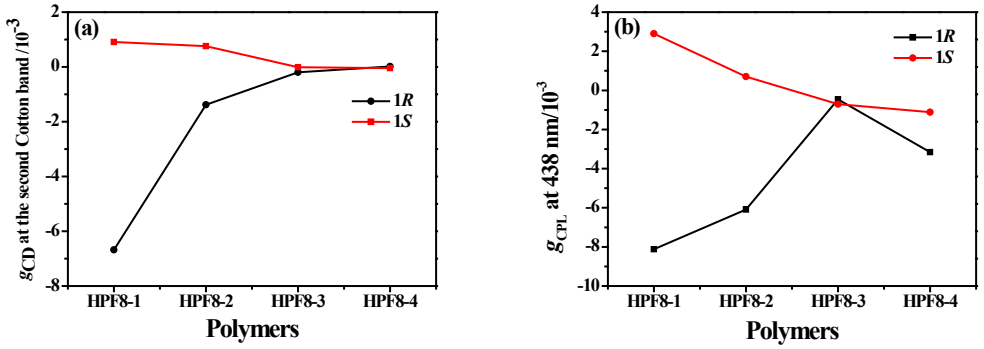


Fig. S13. The values of g_{CD} (a) at 409 nm and g_{CPL} (b) at 438 nm of HPF8s aggregates ([repeating unit]$_0$ = 2.5 × 10^{-5} mol·L^{-1}, repeating unit: 9,9-di-*n*-octylfluorene) formed in the chiral tersolvents of $CHCl_3$/(1*R* or 1*S*)/CH_3OH = 0.3/1.2/1.5 (v/v/v), T = 25 °C.